

Field Manual
40-1

Headquarters
Department of the Army
Washington, D.C. 9 September 1999

Joint Tactical Ground Station Operations

Contents

	Page
PREFACE	v
Chapter 1	
OVERVIEW	
Purpose of the Manual	1-1
Historical Perspective.....	1-2
Mission.....	1-4
Theater Event System.....	1-5
Layout of the Manual.....	1-6
Chapter 2	
COMMAND AND CONTROL	
Peacetime	2-1
Special Wartime.....	2-2
Control	2-5
Chapter 3	
JTAGS DETACHMENT OPERATIONS	
Section I – Theater Missile Defense Operational Elements	3-1
Passive Defense	3-1
Attack Operations	3-2
Active Defense.....	3-3
Command, Control, Communications, Computers, and Intelligence	3-4
Section II – Organization of JTAGS Detachment	3-5
Detachment Headquarters	3-6
Personnel Requirements	3-6

Distribution Restriction: Approved for publication; distribution is unlimited. This determination was made October 1998.

Section III – Personnel	3-6
Manpower.....	3-6
Personnel	3-7
Senior Operator (Crew Chief).....	3-7
System Operators.....	3-7
Voice Reporting and Data Warning	3-7
Section IV – Major Items of Equipment	3-8
Antenna	3-8
Receiver/Decryptor	3-8
Processor	3-9
Power	3-9
Shelter	3-9
Mobilizer Set	3-10
Communications	3-10
System Description	3-10
Section V – System Capabilities and Limitations	3-10
Chemical and Nuclear Attacks.....	3-10
Electronic Attack	3-11
Sabotage	3-11
Weather	3-11
Section VI – Concept of Detachment Operations	3-11
Employment in Theater	3-11
Receipt and Processing of DSP Data	3-11
Section VII – JTACS Modes of Operations	3-13
Operational Mode	3-13
Analysis, Training, and Test Mode	3-13
Maintenance Mode.....	3-14
Section VIII – Deployment	3-14
Strategic Deployment to a Theater of Operations	3-14
General Planning Considerations.....	3-15
Air Movement.....	3-15
C-141, C-17, C-5 Load Plans.....	3-15
Sea Movement	3-16
Ground Movement.....	3-17
Movement by Truck.....	3-17
Overseas Highways	3-17
Movement by Rail.....	3-17

Section IX – System Operations	3-17
Employment and Operations Under Normal Conditions	3-17
Security	3-17
Physical Security.....	3-18
Station Survivability.....	3-18
Soldier Survivability	3-18
Site Considerations	3-18
Section X – Communications	3-18
Broadcast Modes.....	3-19
Data Warning Networks	3-19
Voice Reporting.....	3-21
Section XI – Connectivity Requirements.....	3-21
Voice Links	3-21
Data Warning Links	3-22
Section XII – Reporting.....	3-22
Classification and Broadcasting.....	3-22
Messages and Reports	3-22
Voice Reporting Nets.....	3-24
Secondary Nets	3-24
Chapter 4 SERVICE AND SUPPORT	
General Planning	4-1
Combat Service Support.....	4-1
Supply	4-3
Fixing.....	4-5
Moving.....	4-10
Manning, Combat Health Support, and Field Services Support	4-10
Reconstitution.....	4-11
Security	4-12
Engineering and Facilities...	4-12
External Communications Support	4-13

Appendices

Appendix A	JTAGS OPERATIONS ORDER	A-1
Appendix B	SITING CHECKLIST	B-1
	General Information.....	B-1
	Power Requirements	B-3
	Electronic	B-5
	Host Support.....	B-6
Appendix C	SAFETY AND RISK ASSESSMENTS	C-1
	JTAGS Specific Dangers.....	C-1
Appendix D	COMBAT OPERATIONS UNDER UNUSUAL CONDITIONS	D-1
	Desert Conditions	D-1
	Tropical Conditions.....	D-1
	Arctic Conditions.....	D-1
	Nuclear, Chemical and Biological (NBC) Conditions.....	D-1
	Electromagnetic Pulse (EMP) Conditions	D-1
Appendix E	NUCLEAR, BIOLOGICAL, CHEMICAL OPERATIONS	E-1
	Equipment Protection.....	E-1
	Defensive Operations	E-1
Appendix F	VEHICLE MOVEMENTS AND CONVOYS	F-1
	Special Precautions	F-1
	Tactical Road March.....	F-2
Appendix G	EXERCISE SUPPORT	G-1
	Exercise Methodology.....	G-1
	Exercise Scheduling.....	G-1
	TBM Warning Exercise Checklist	G-2
Glossary		Glossary-1
Bibliography		Bibliography-1